

Application No. 08/771,467

Docket No.: 47309-00025USC1

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Cancelled)

2. (Currently Amended) The method as recited in claim 47, wherein the at least one pesticide is ~~in a solid form, said method further comprising the step of~~ formed by heating at the least one a solid pesticide to convert the solid pesticide it into the at least one liquid ~~form pesticide~~ prior to said binding step.

3. (Previously Presented) The method as recited in claim 47, wherein said hydrophobic polymer has a hydrophobicity of less than about 13 on either the hydrophilic lipophilic balance or solubility parameter scale.

4. (Previously Presented) The method as recited in claim 47, wherein said forming comprises enveloping said mixture as an inner part within a second hydrophobic polymer.

5-6. (Cancelled)

7. (Previously Presented) The method as recited in claim 47, wherein said hydrophobic thermoplastic polymer is selected from the group consisting of low density polyethylene, high density polyethylene, ethylene vinyl acetate copolymer, polyester, silicone, neoprene, isoprene polymer and copolymer, and combinations thereof.

8. (Currently Amended) The method as recited in claim 47, wherein the at least one said pesticide has a vapor pressure in the range from 1 nPa to 100 mPa.

9-10. (Cancelled)

11. (Previously Presented) The method as recited in claim 47, wherein said pesticide is water soluble.

35-claims

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12-29. (Cancelled)

30. (Previously Presented) The method claimed in claim 47 wherein the forming step is performed by injection molding.

31. (Canceled)

32. (Currently Amended) The method claimed in claim ~~47~~ 34 wherein the at least one pesticide further includes a pesticide for eliminating wood boring insects.

33. (Previously Presented) The method claimed in claim 47 wherein the matrix is formed into a pellet.

34. (Previously Presented) The method claimed in claim 47 wherein the matrix is formed into a sheet.

35. (Previously Presented) The method claimed in claim 47 wherein the matrix is formed into strips.

36. (Currently Amended) The method claimed in claim 47 wherein said carrier ~~particles comprise~~ comprises from about 3 to about 30 weight percent of said matrix and said polymer comprises from about 40 weight percent to about 92 weight percent of said matrix.

37. (Previously Presented) The method of claim 47 wherein said hydrophobic polymer has a hydrophobicity of less than about 10 on either the hydrophilic lipophilic balance or solubility parameter scale.

38. (Previously Presented) The method of claim 47 wherein said hydrophobic polymer has a hydrophobicity of less than about 8 on either the hydrophilic lipophilic balance or solubility parameter scale.

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39. (Currently Amended) The method of claim 47 wherein the carrier particles comprise [is] carbon black.

40. (Currently Amended) The method of claim 47 wherein the carrier particles comprise [is] hydroxyapatite.

41. (Previously Presented) A method of making a device for controlled release of at least one pesticide useful for retarding or preventing decay or deterioration of a wooden object by pests, said method comprising the steps of:

(a) binding at least one liquid pesticide to carrier particles to produce pesticide-containing carrier particles; then

(b) combining said pesticide-containing carrier particles with a thermoplastic hydrophobic polymer to produce said device, wherein the amount of pesticide bound to the carrier particles is sufficient so as to achieve a release rate of the pesticide from said device in the range from 0.4 $\mu\text{g}/\text{cm}^2/\text{day}$ to 40.4 $\mu\text{g}/\text{cm}^2/\text{day}$.

42-43. (Cancelled)

44. (Previously Presented) The method of claim 47, wherein the release rate of the pesticide from the controlled release matrix is reduced so as to retard or prevent decay or deterioration of the wooden object by pests for a period of at least about 7 years.

45. (Previously Presented) The method as recited in claim 47, wherein the polymer is low density polyethylene.

46. (Cancelled)

47. (Currently Amended) A method of making a matrix for controlled release of at least one pesticide useful for retarding or preventing decay or deterioration of a wooden object by pests, the method comprising the steps of:

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(a) forming a mixture comprising at least one liquid pesticide, a plurality of carrier particles, and a hydrophobic thermoplastic polymer to bind a sufficient amount of the pesticide to the carrier particles to form pesticide-containing carrier particles so as to reduce the release rate of the pesticide from the controlled release matrix to the range from $0.4 \mu\text{g}/\text{cm}^2/\text{day}$ to $40.4 \mu\text{g}/\text{cm}^2/\text{day}$, the at least one liquid pesticide is selected from the group consisting of liquid pyrethrin, tefluthrin, permethrin, cypermethrin, fenoxycarb, chlorpyrifos, lambdacyhalothrin, resmethrin, deltamethrin, cyphenothrin, cyfluthrin, and combinations thereof; and

(b) forming the pesticide-containing carrier particles and the polymer into a controlled release matrix having pesticide-containing carrier particles dispersed throughout the polymer.

48. (Previously Presented) The method claimed in claim 47, wherein the pesticide is lambdacyhalothrin.

49. (Previously Presented) The method claimed in claim 47, further comprising the step of shaping the mixture of the pesticide-containing carrier particles and the polymer into a multi-laminate sheet.

50. (Previously Presented) The method claimed in claim 34, wherein the sheet has a thickness in the range from about 60 mil to about 120 mil.

51. (Previously Presented) The method claimed in claim 47, wherein said at least one pesticide comprises from about 5 to about 30 weight percent of the matrix.

52. (Cancelled)

53. (Previously Presented) The method as recited in claim 41, wherein the polymer is low density polyethylene.

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54. (Previously Presented) The method as recited in claim 41, wherein the at least one pesticide is an insecticide.

55. (Previously Presented) The method as recited in claim 41, wherein the pesticide is selected from the group consisting of pyrethrin, tefluthrin, permethrin, cypermethrin, fenoxycarb, chlorpyrifos, lambdacyhalothrin, resmethrin, deltamethrin, cyphenothrin, cyfluthrin, and combinations thereof.

56. (Previously Presented) The method as recited in claim 41, wherein the pesticide is lambdacyhalothrin.

57. (Previously Presented) The method as recited in claim 41, wherein the release rate of the pesticide from the matrix is between about $0.7 \mu\text{g}/\text{cm}^2/\text{day}$ to about $20.6 \mu\text{g}/\text{cm}^2/\text{day}$.

58. (Previously Presented) The method as recited in claim 41, wherein the device is in the form of a rod, sheet, sleeve, strip, or pellet.

59. (Previously Presented) The method claimed in claim 41, further comprising the step of shaping the device into a sheet having at least one additional layer.

60. (Previously Presented) The method claimed in claim 59, wherein the at least one additional layer is selected from the group consisting of polyethylene terephthalate, polyvinylidene chloride, and combinations thereof.

61. (Previously Presented) The method claimed in claim 41, further comprising the step of shaping the device into a multi-laminate sheet.

62. (Previously Presented) The method claimed in claim 41 further comprising the step of shaping the device into a pellet.

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63. (Previously Presented) The method as recited in claim 41, wherein the polymer is selected from the group consisting of low density polyethylene, high density polyethylene, ethylene vinyl acetate copolymer, urethane, polyester, silicone, neoprene, isoprene polymer and copolymer, and combinations thereof.